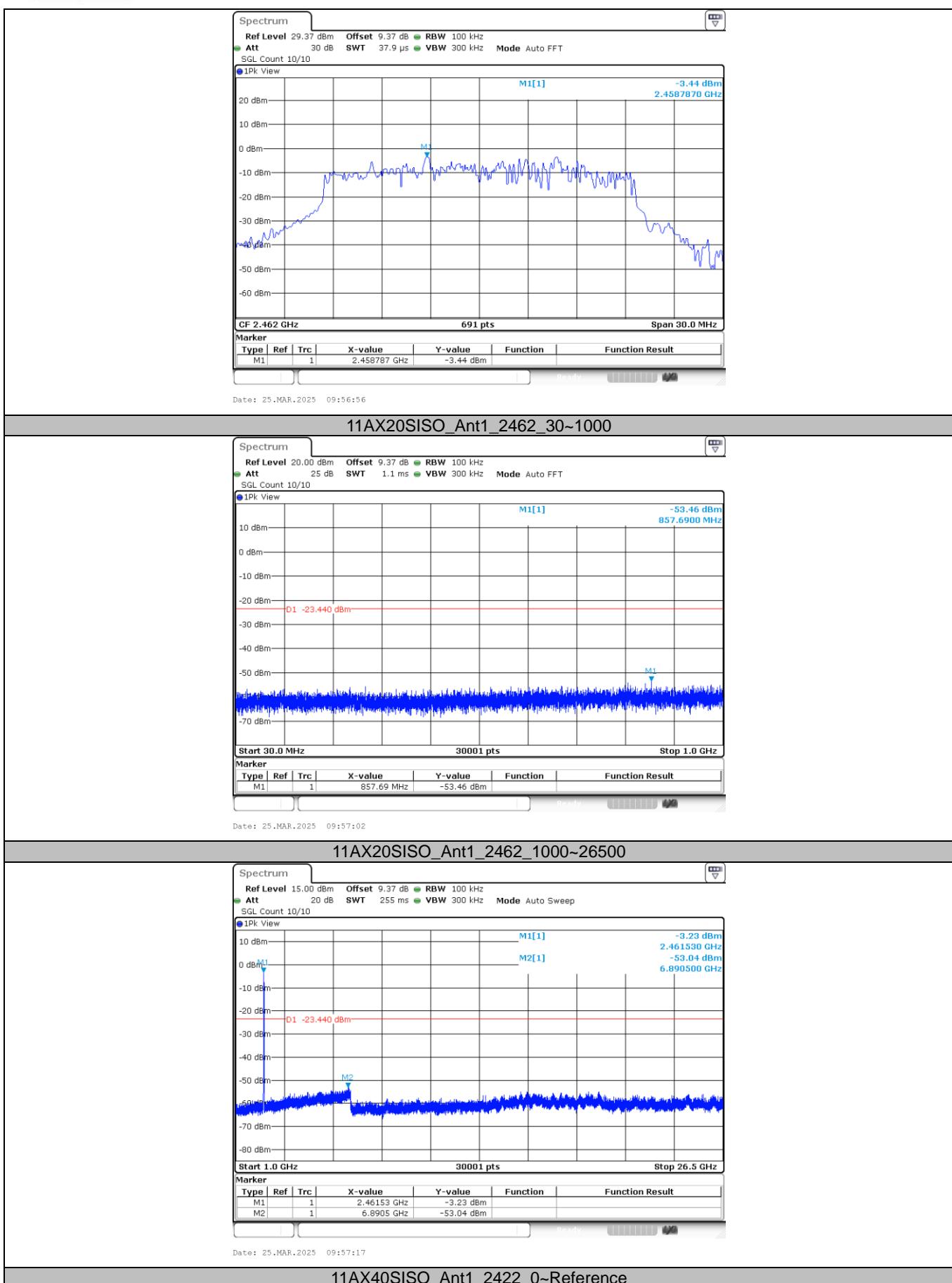


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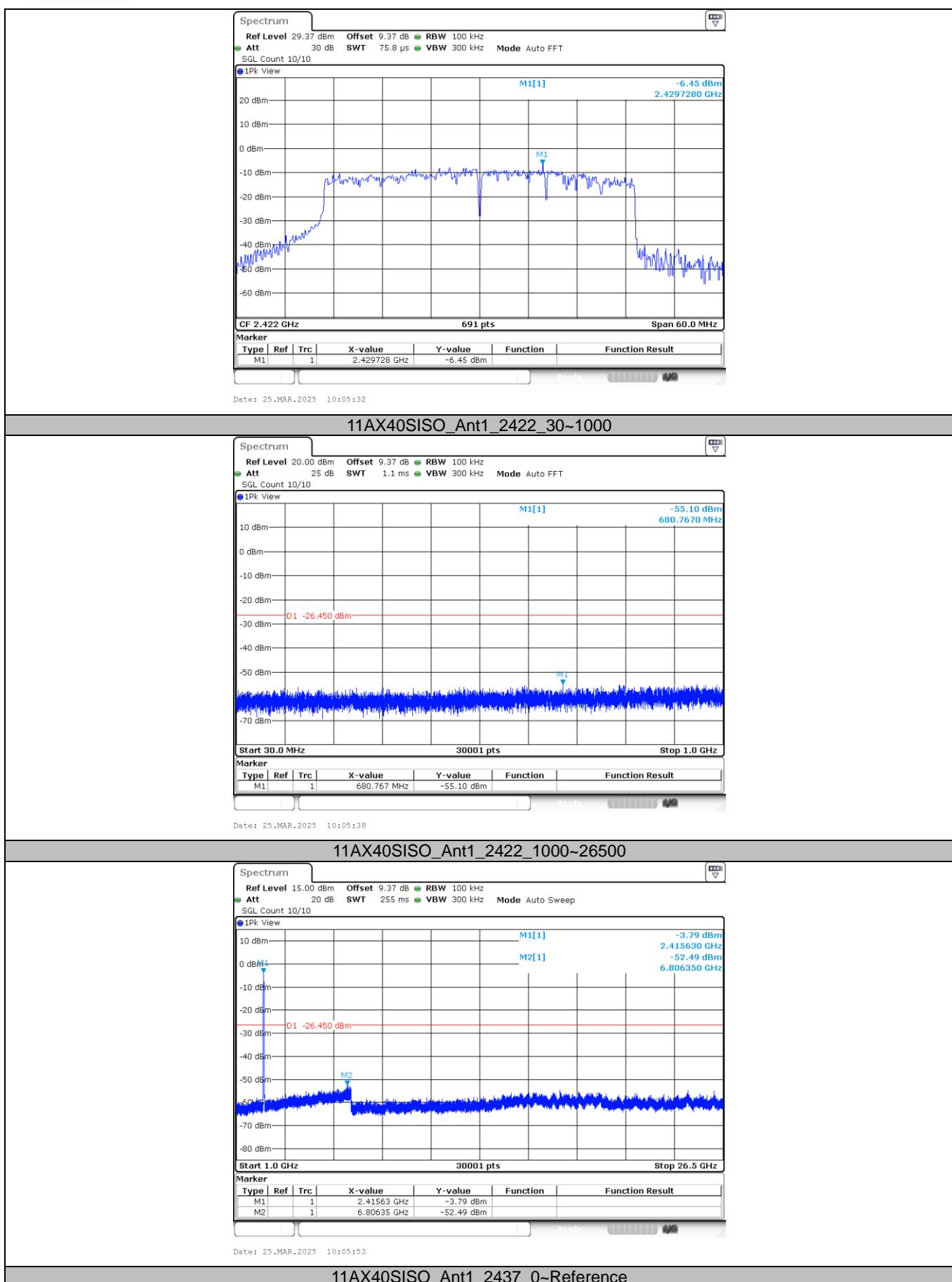


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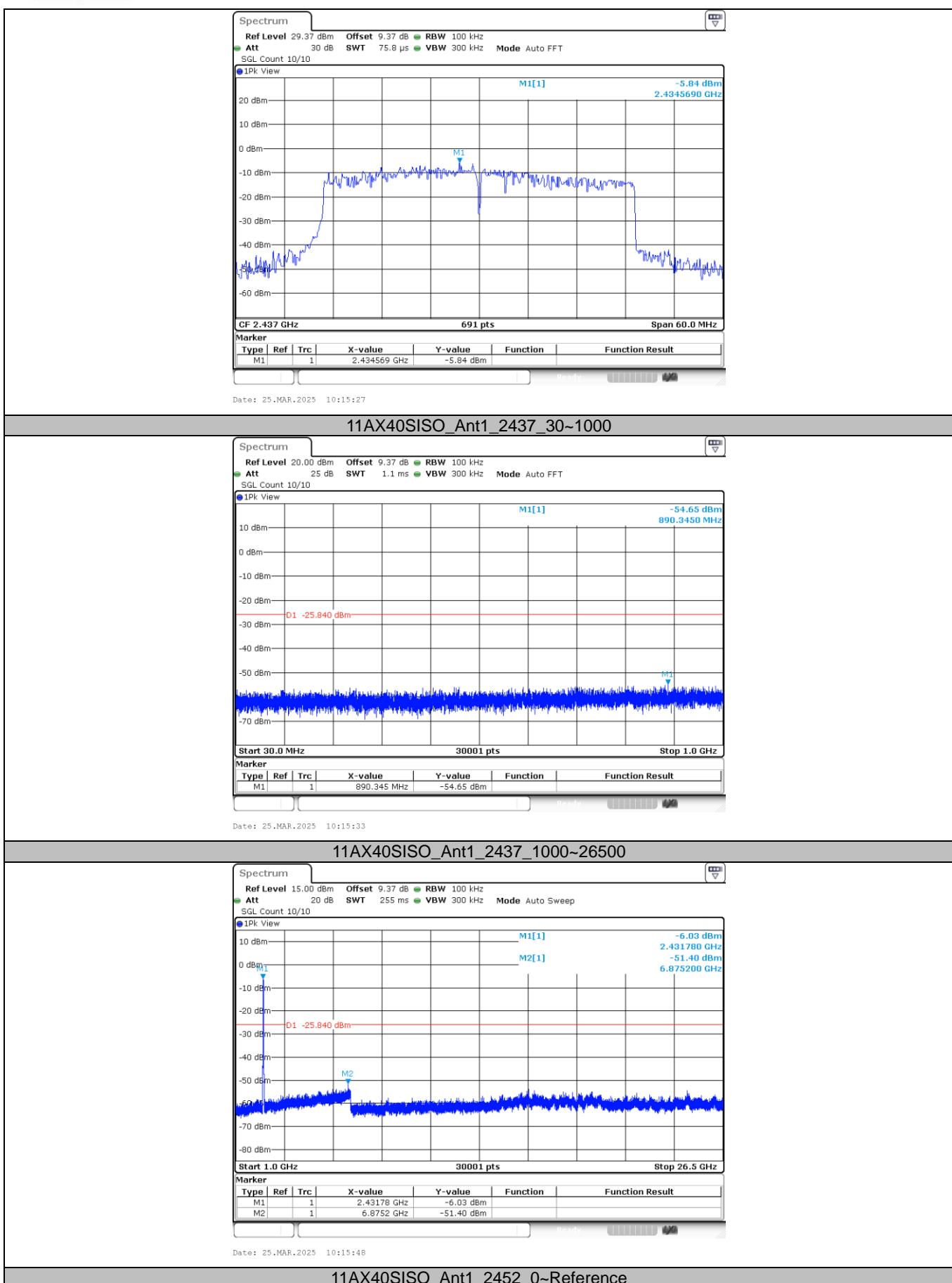


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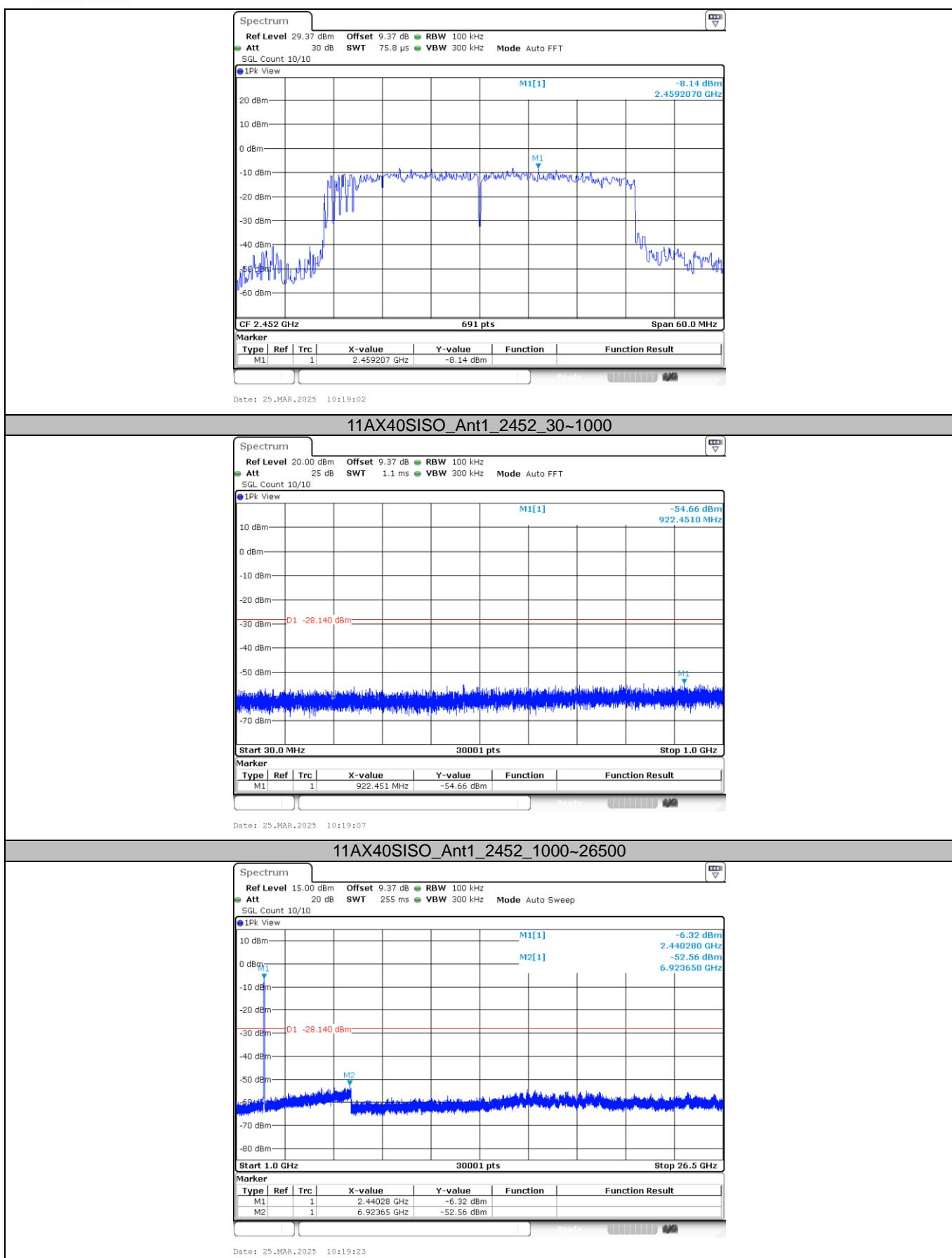


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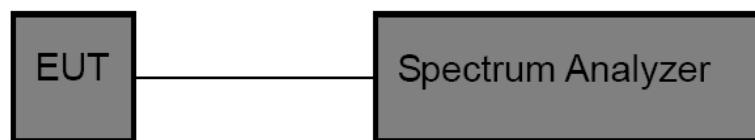
3.5. DTS Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2) / RSS-247 5.2 a

Test Item	Limit	Frequency Range (MHz)
DTS Bandwidth	≥ 500 kHz (6dB bandwidth)	2400~2483.5

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. DTS Spectrum Setting:
 - (1) Set RBW = 100 kHz.
 - (2) Set the video bandwidth (VBW) ≥ 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.OCB Spectrum Setting:
 - (1) Set RBW = 1% ~ 5% occupied bandwidth.
 - (2) Set the video bandwidth (VBW) ≥ 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

Test Mode

Please refer to the clause 2.4.

**Test Result**

Test Mode	Channel Frequency[MHz]	OCB [MHz]	DTS BW [MHz]	Limit[MHz]	Verdict
11B	2412	14.905	10.08	≥ 0.5	PASS
	2437	14.466	9.60		
	2462	14.386	10.08		
11G	2412	17.143	16.36	≥ 0.5	PASS
	2437	16.823	16.36		
	2462	17.223	16.32		
11N20SISO	2412	19.381	17.60	≥ 0.5	PASS
	2437	17.862	16.92		
	2462	17.982	17.56		
11N40SISO	2422	37.962	36.08	≥ 0.5	PASS
	2437	36.763	36.32		
	2452	37.722	36.48		
11AX20SISO	2412	19.101	16.68	≥ 0.5	PASS
	2437	18.861	18.12		
	2462	19.221	18.40		
11AX40SISO	2422	37.642	36.72	≥ 0.5	PASS
	2437	37.562	36.64		
	2452	37.962	36.64		

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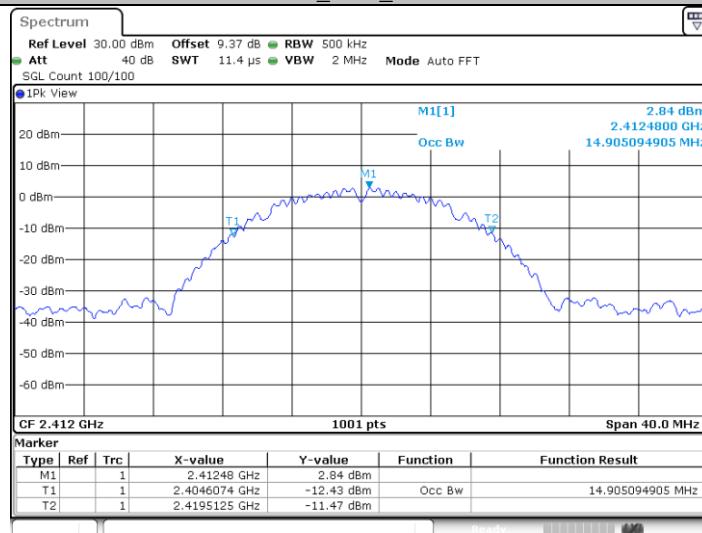
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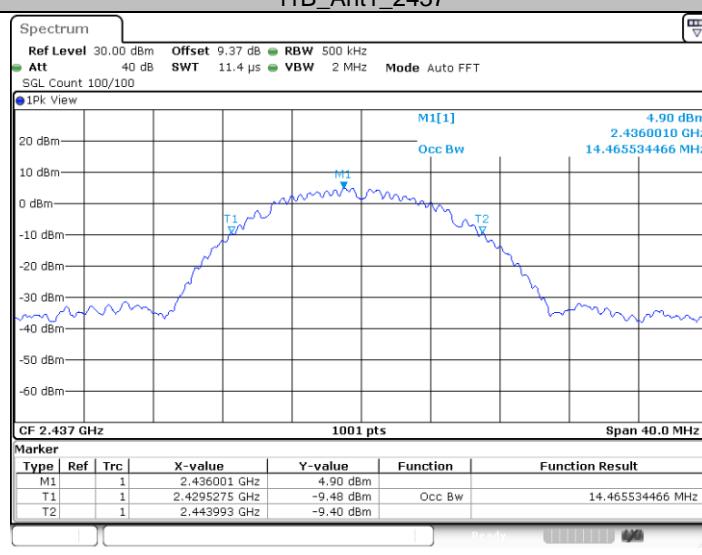


99% Bandwidth:

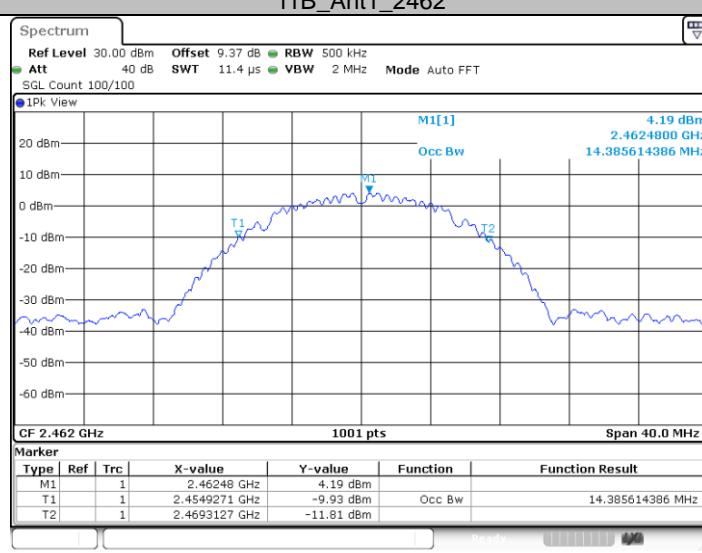
11B_Ant1_2412



11B_Ant1_2437



11B_Ant1_2462



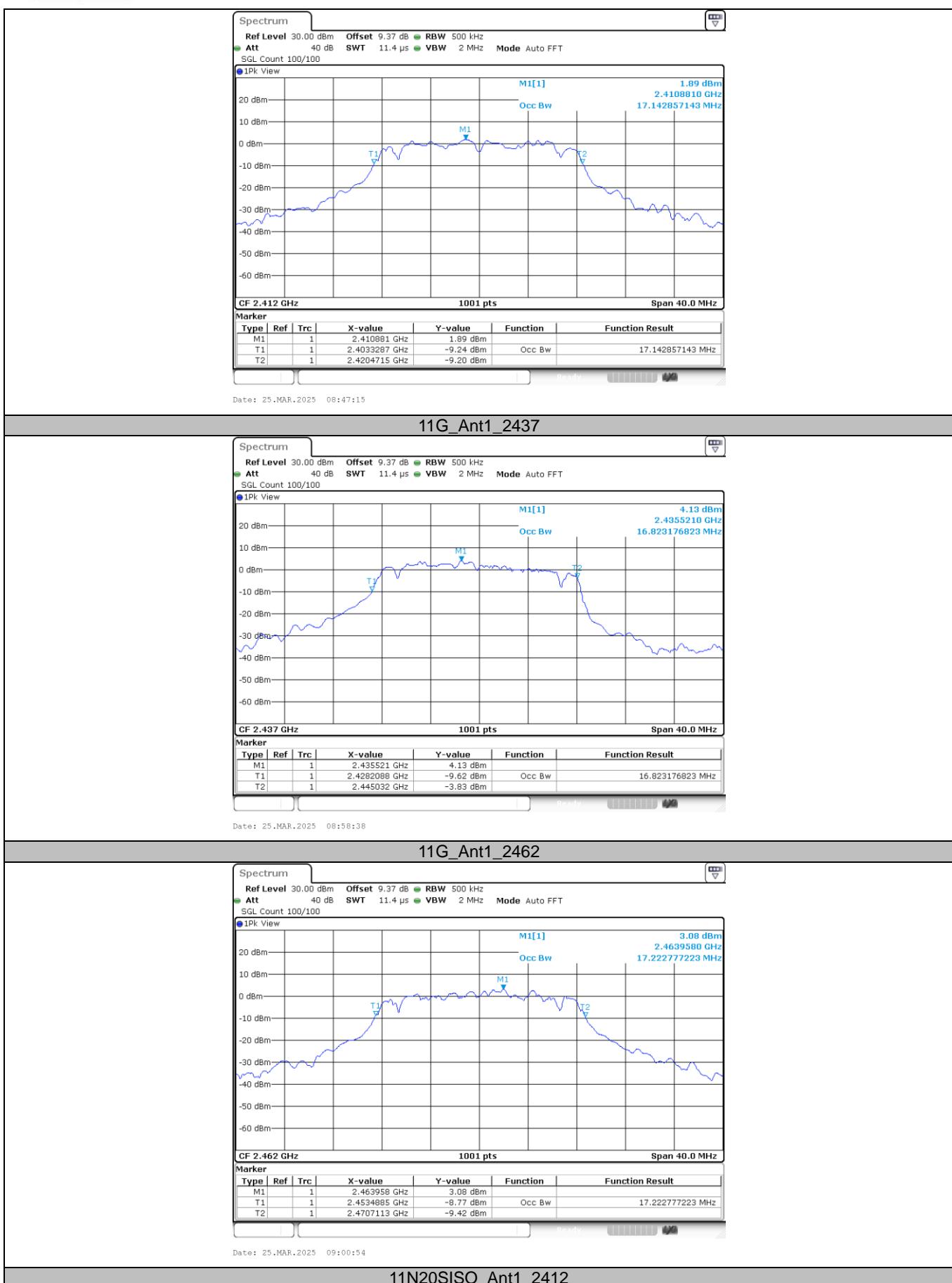
11G_Ant1_2412

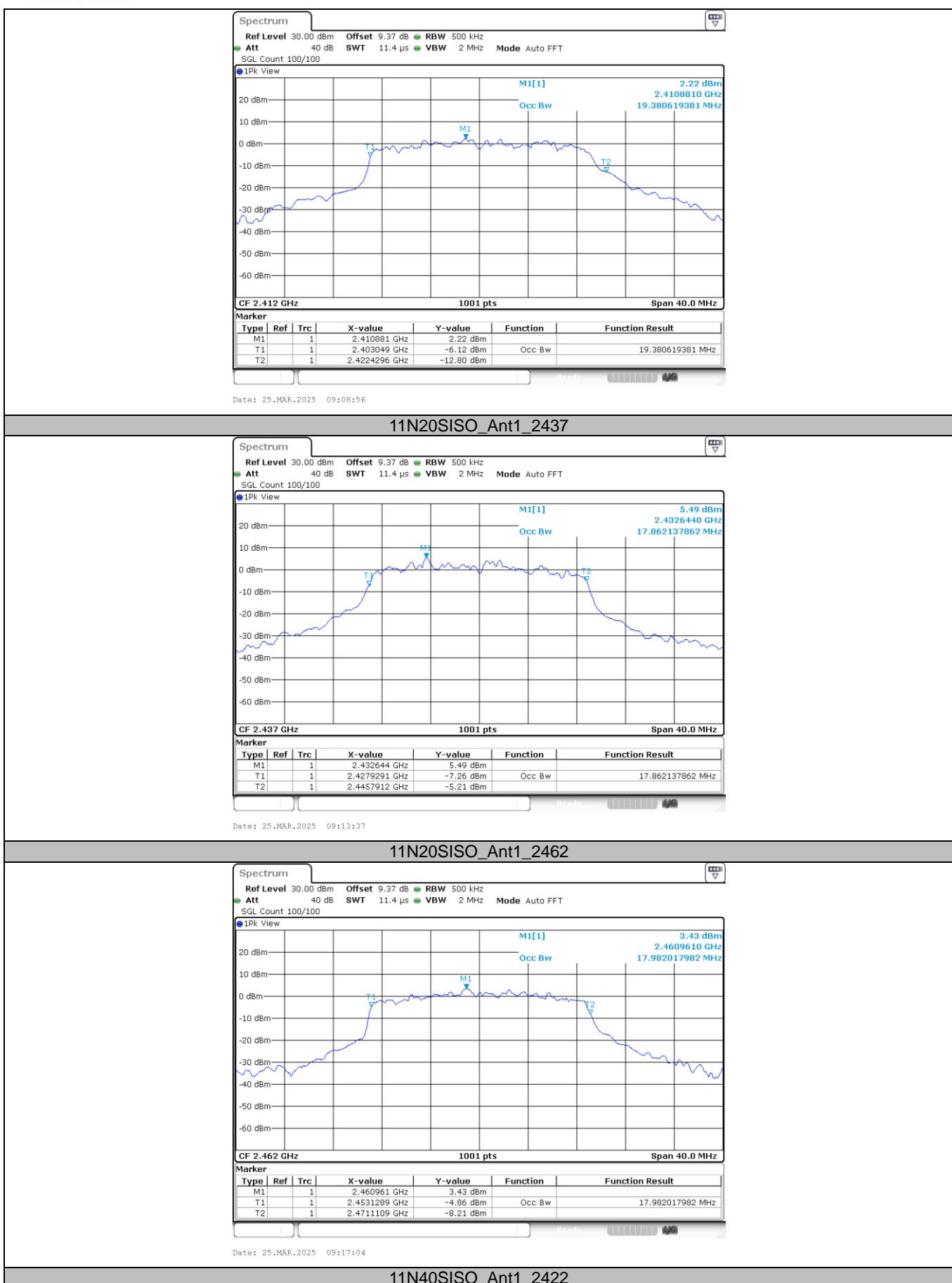
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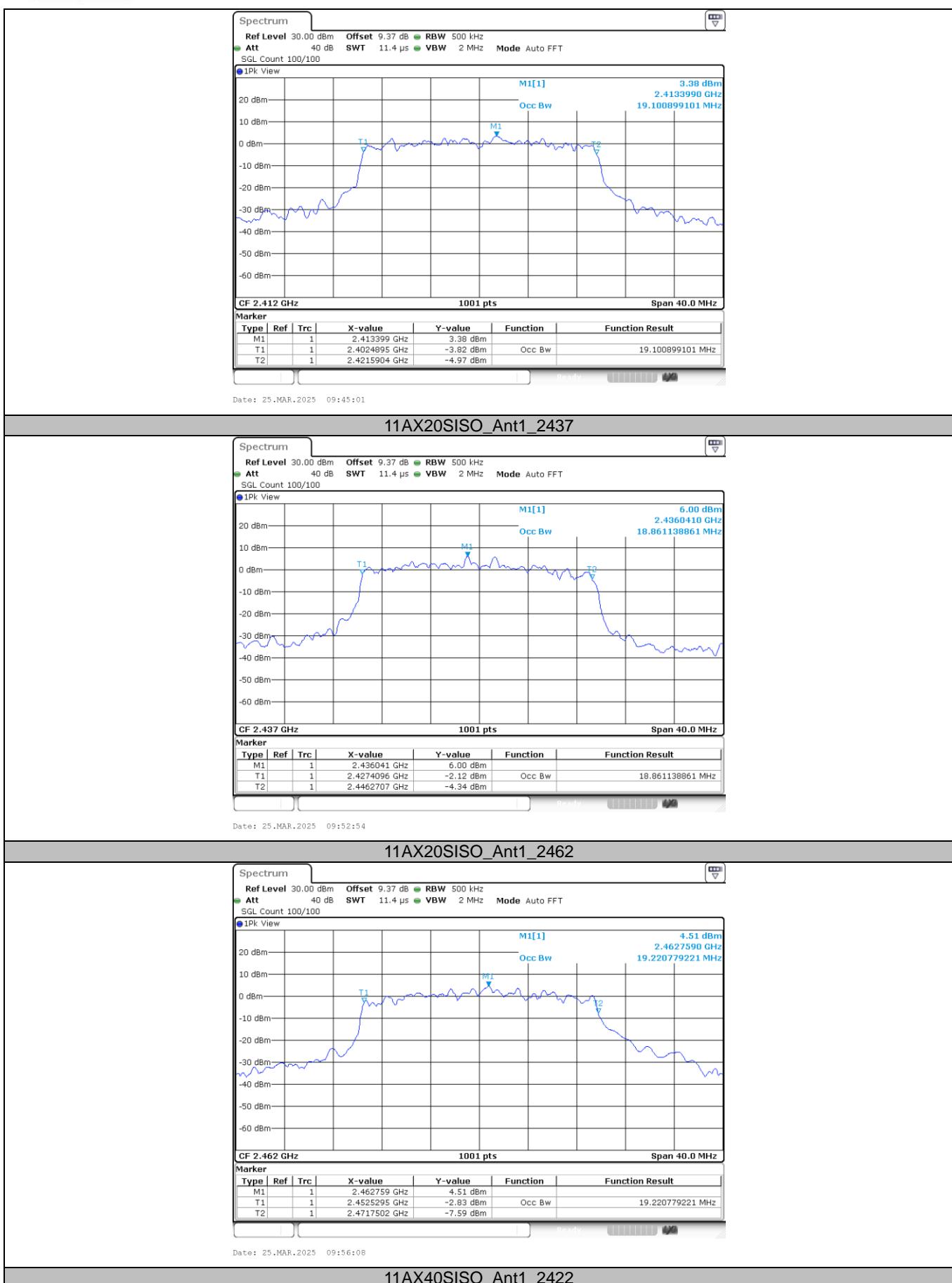
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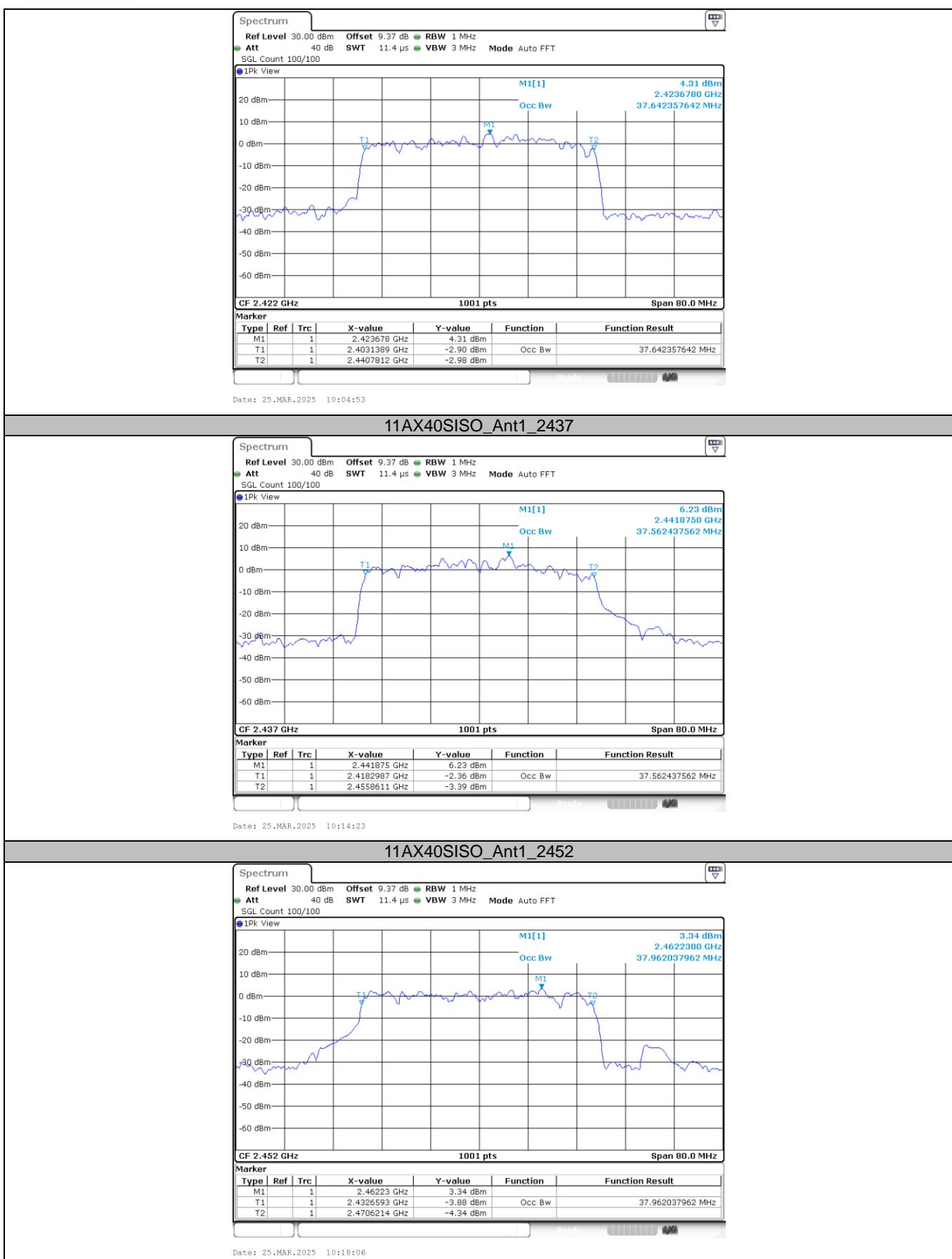


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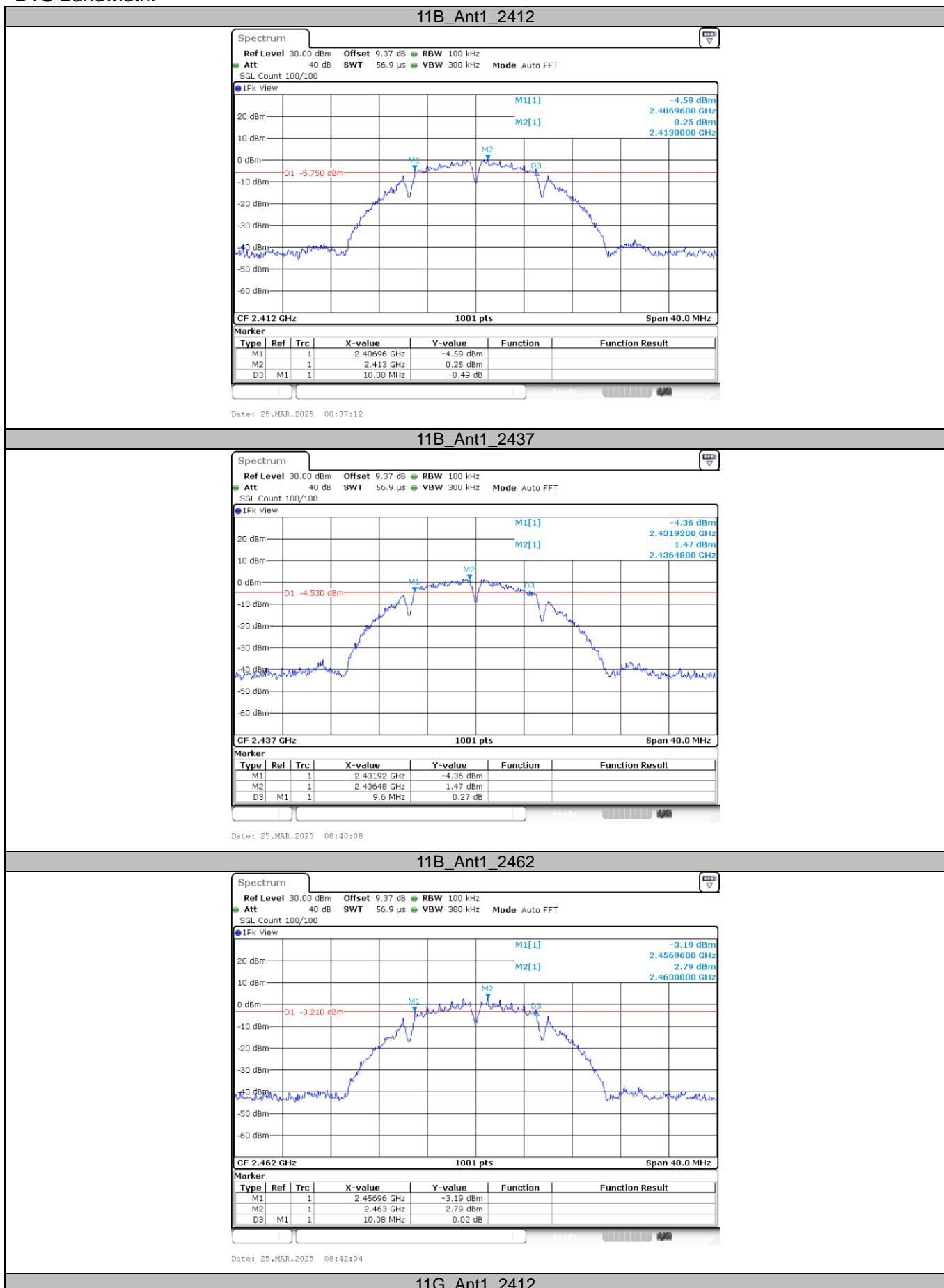
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DTS Bandwidth:

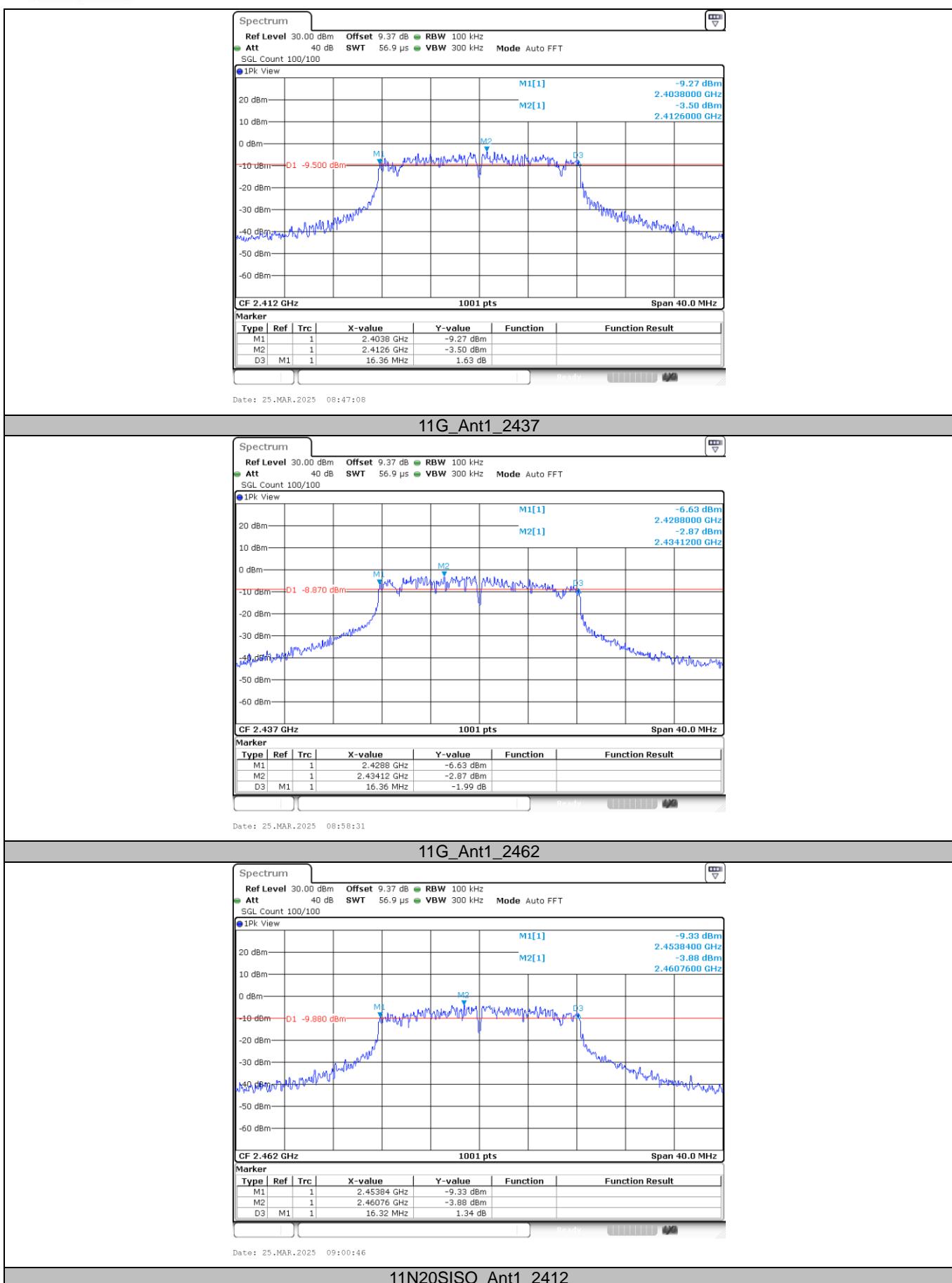


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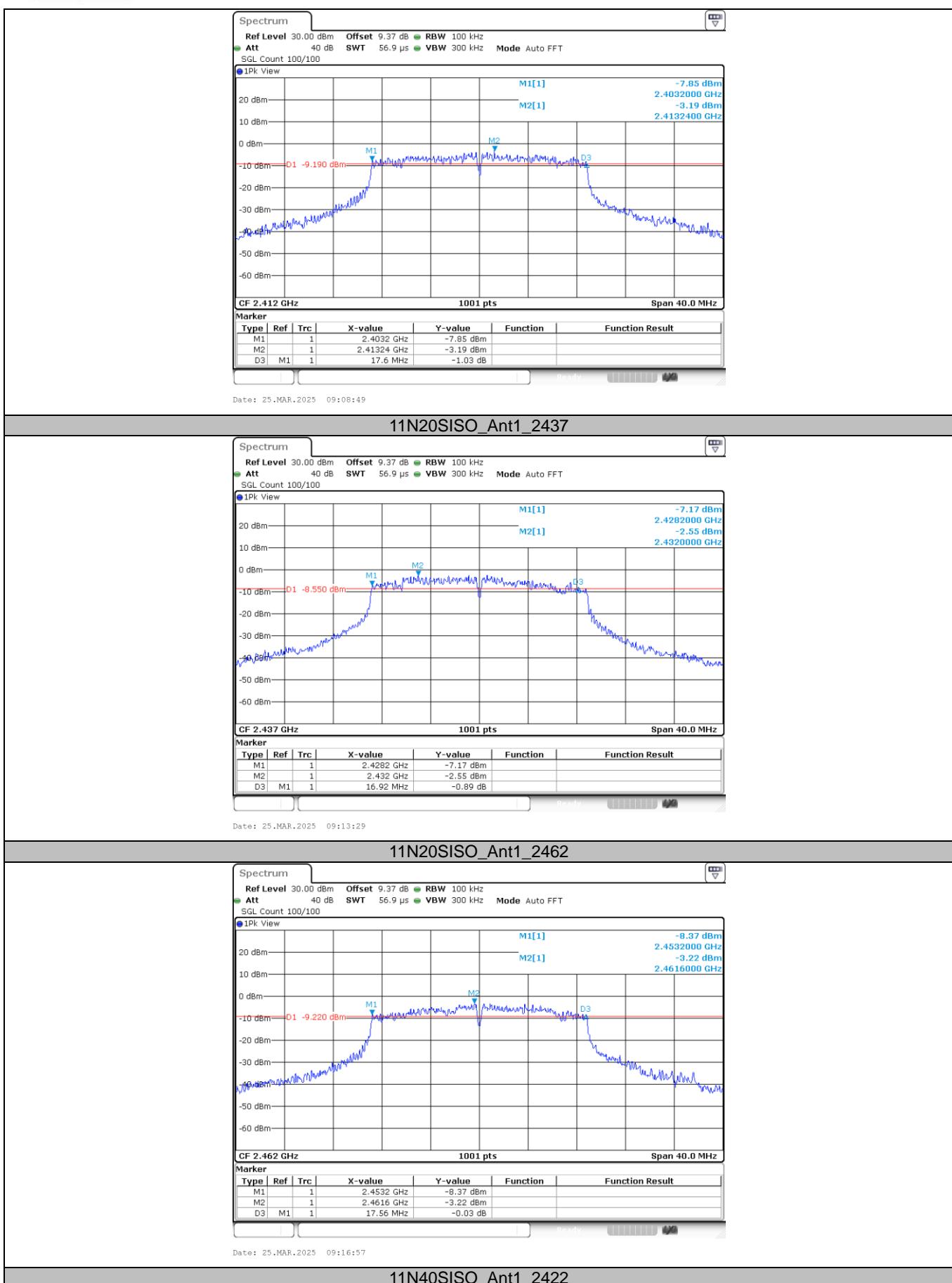


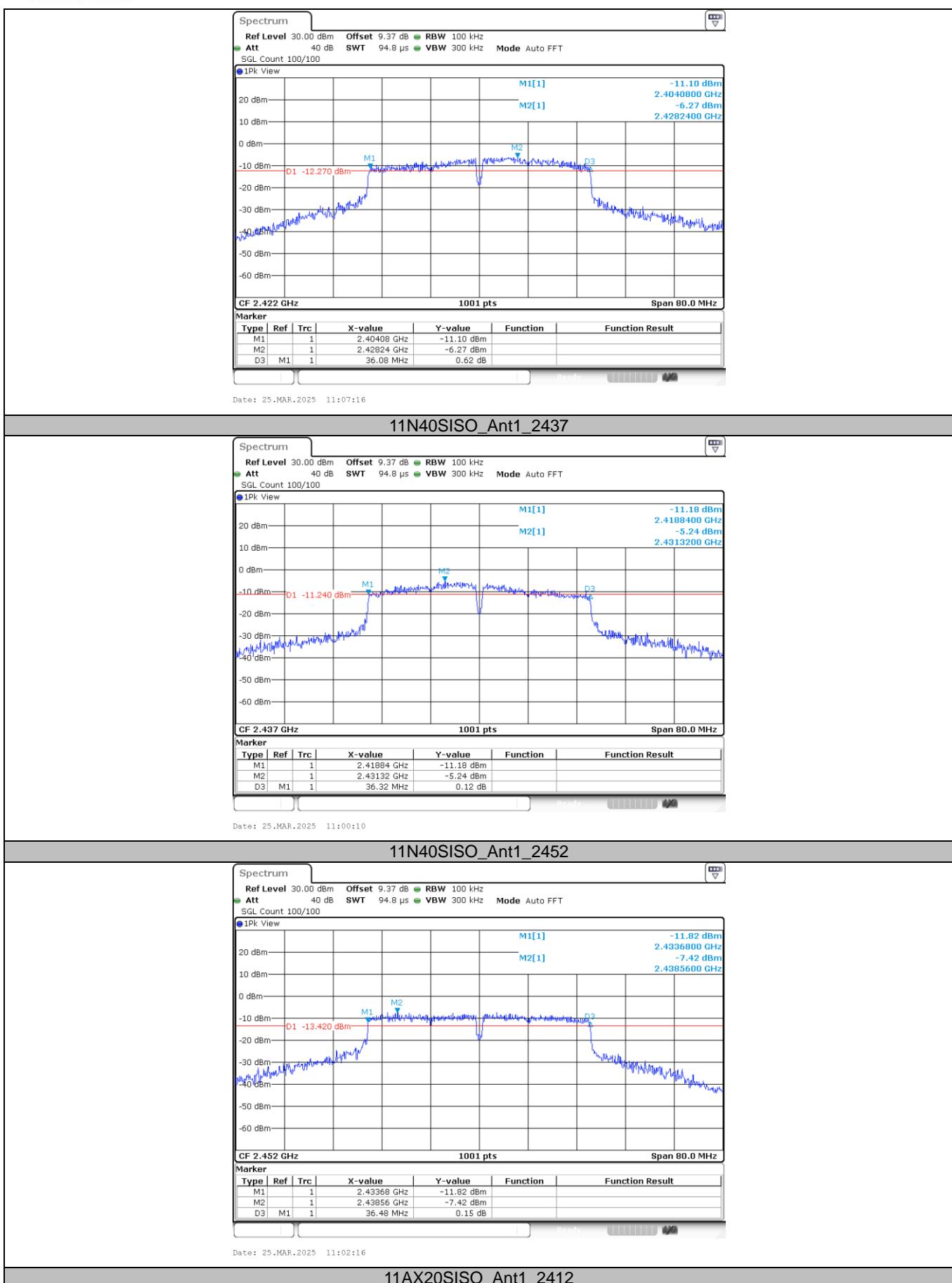
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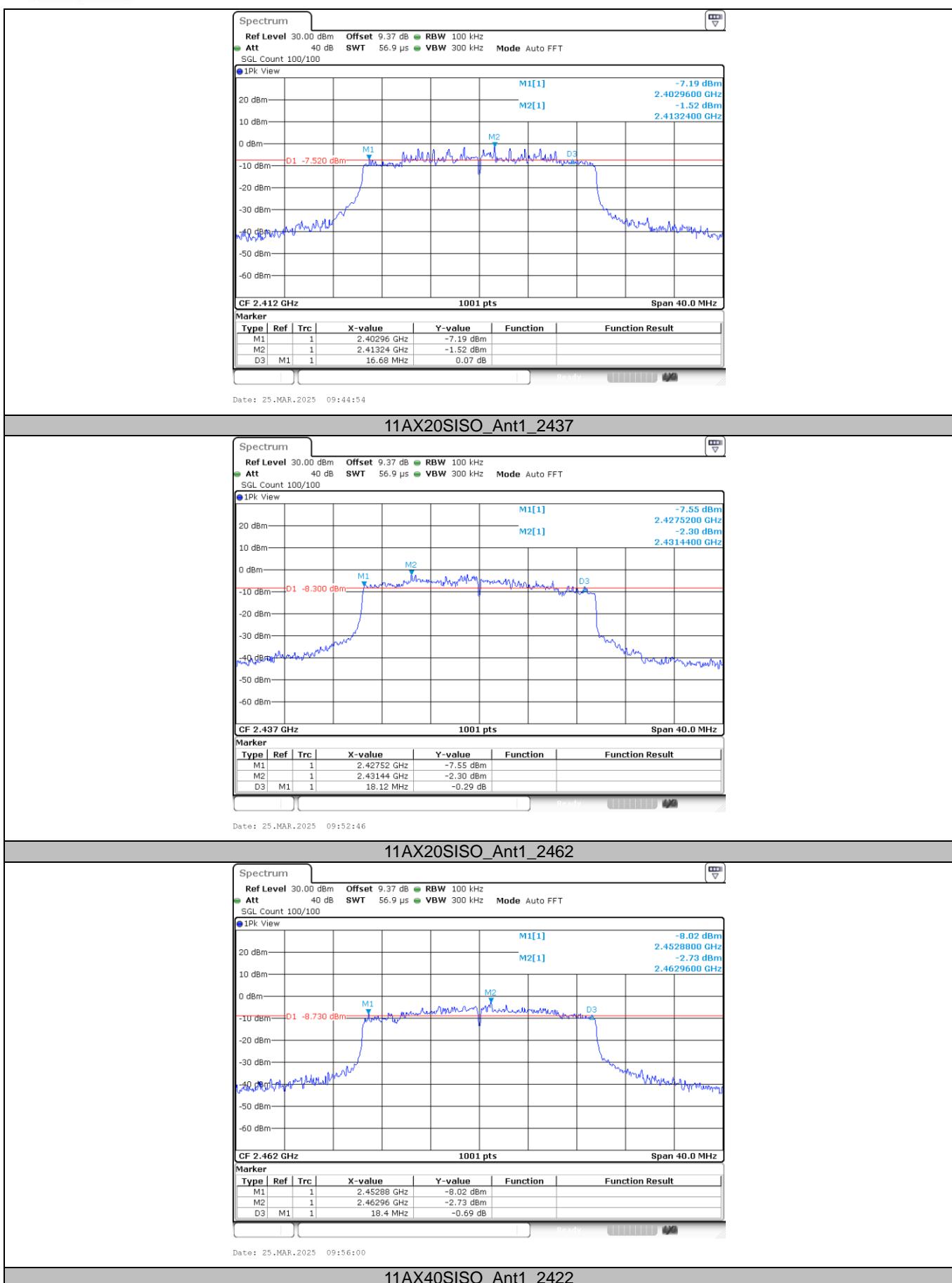
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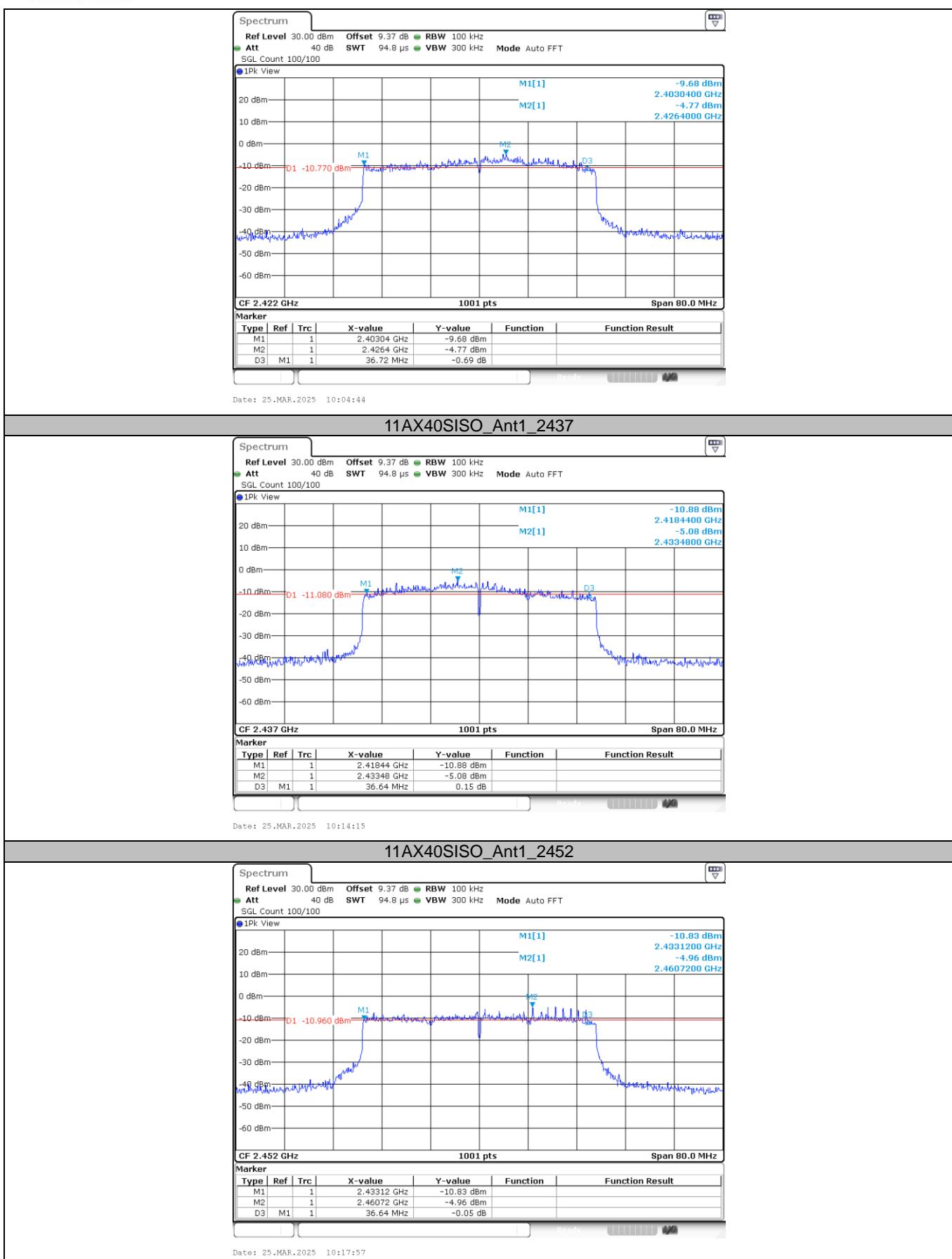
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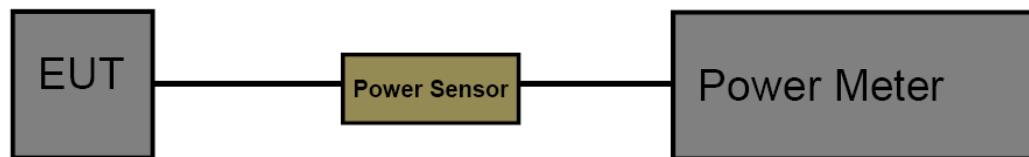
3.6. Peak Output Power

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3) / RSS-247 5.4 d

Section	Test Item	Limit	Frequency Range (MHz)
FCC CFR 47 Part15.247 (b)(3)	Maximum Conducted Output Power	1 Watt or 30dBm	2400~2483.5
ISED RSS-247 5.4 d	Maximum Conducted Output Power	1 Watt or 30dBm	2400~2483.5
	EIRP	4 Watt or 36dBm	2400~2483.5

Test Configuration



Test Procedure

1. The maximum conducted output power may be measured using a broadband RF power meter.
2. Power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor.
3. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.
4. Record the measurement data.

Test Mode

Please refer to the clause 2.4.

**Test Result**

Test Mode	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	2412	13.80	≤30.00	PASS
	2437	15.69	≤30.00	PASS
	2462	14.98	≤30.00	PASS
11G	2412	16.20	≤30.00	PASS
	2437	17.44	≤30.00	PASS
	2462	16.29	≤30.00	PASS
11N20SISO	2412	17.01	≤30.00	PASS
	2437	18.09	≤30.00	PASS
	2462	17.21	≤30.00	PASS
11N40SISO	2422	17.59	≤30.00	PASS
	2437	17.70	≤30.00	PASS
	2452	16.94	≤30.00	PASS
11AX20SISO	2412	17.08	≤30.00	PASS
	2437	18.53	≤30.00	PASS
	2462	17.73	≤30.00	PASS
11AX40SISO	2422	18.58	≤30.00	PASS
	2437	18.31	≤30.00	PASS
	2452	17.54	≤30.00	PASS

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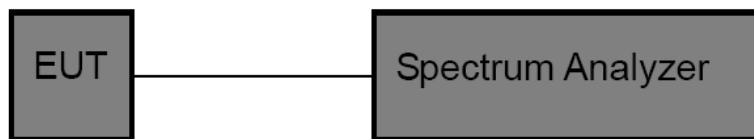
3.7. Power Spectral Density

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e) / RSS-247 5.2 b

Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	8 dBm (in any 3 kHz)	2400~2483.5

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.
3. Spectrum Setting:
Set analyzer center frequency to DTS channel center frequency.
Set span to at least 1.5 times the OBW.
Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
Set VBW $\geq [3 \times \text{RBW}]$.
Detector = power averaging (rms) or sample detector (when rms not available).
Ensure that the number of measurement points in the sweep $\geq [2 \times \text{span} / \text{RBW}]$.
Sweep time = auto couple.
Employ trace averaging (rms) mode over a minimum of 100 traces.
Use the peak marker function to determine the maximum amplitude level.
If the measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span to meet the minimum measurement point requirement as the RBW is reduced).

Test Mode

Please refer to the clause 2.4.

**Test Result**

Test Mode	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	2412	-11.60	≤8.00	PASS
	2437	-9.80	≤8.00	PASS
	2462	-11.02	≤8.00	PASS
11G	2412	-14.84	≤8.00	PASS
	2437	-13.24	≤8.00	PASS
	2462	-14.15	≤8.00	PASS
11N20SISO	2412	-13.75	≤8.00	PASS
	2437	-13.18	≤8.00	PASS
	2462	-12.75	≤8.00	PASS
11N40SISO	2422	-16.42	≤8.00	PASS
	2437	-15.66	≤8.00	PASS
	2452	-17.45	≤8.00	PASS
11AX20SISO	2412	-15.21	≤8.00	PASS
	2437	-13.17	≤8.00	PASS
	2462	-13.89	≤8.00	PASS
11AX40SISO	2422	-16.43	≤8.00	PASS
	2437	-15.53	≤8.00	PASS
	2452	-18.22	≤8.00	PASS

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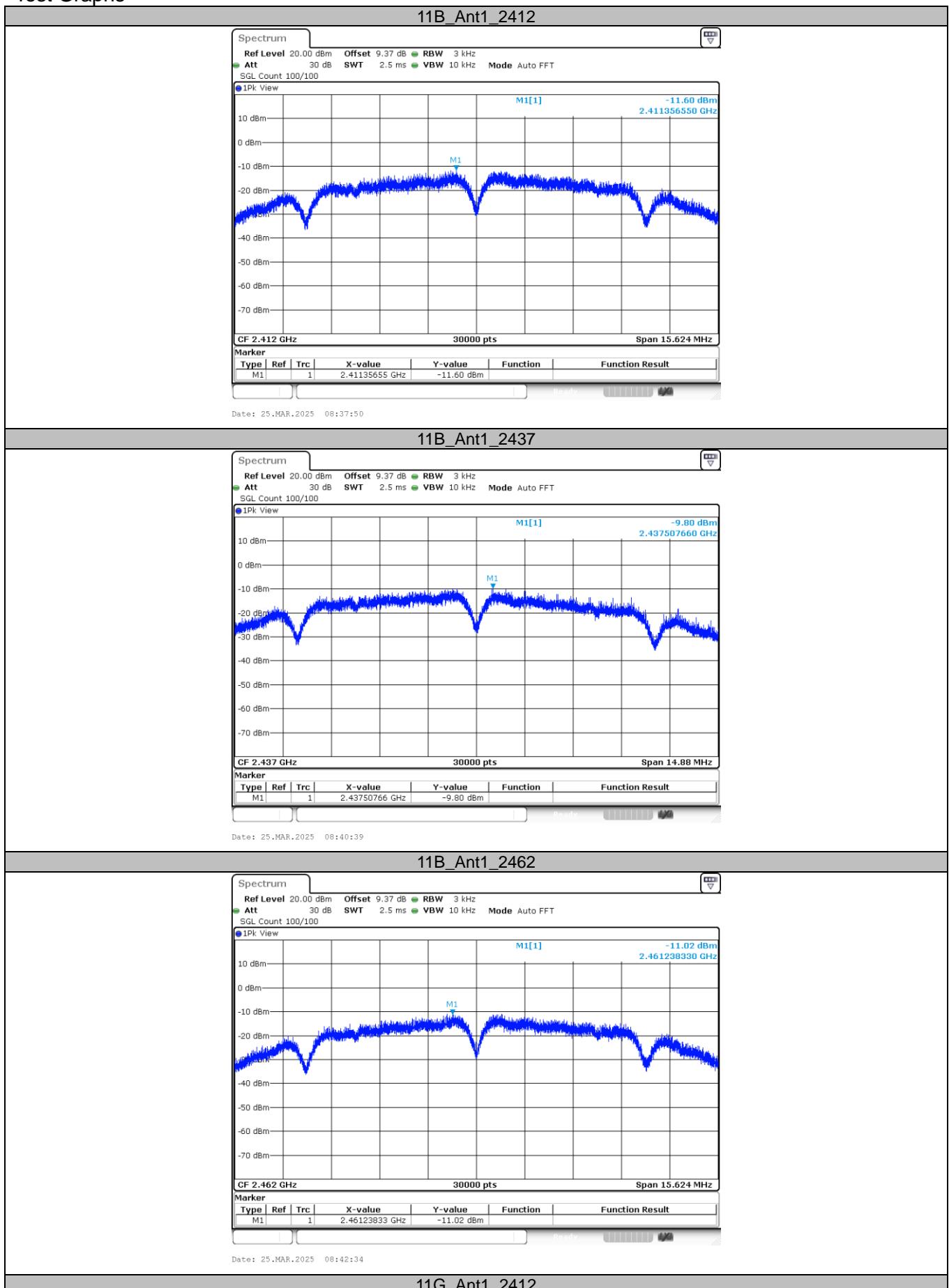
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Test Graphs

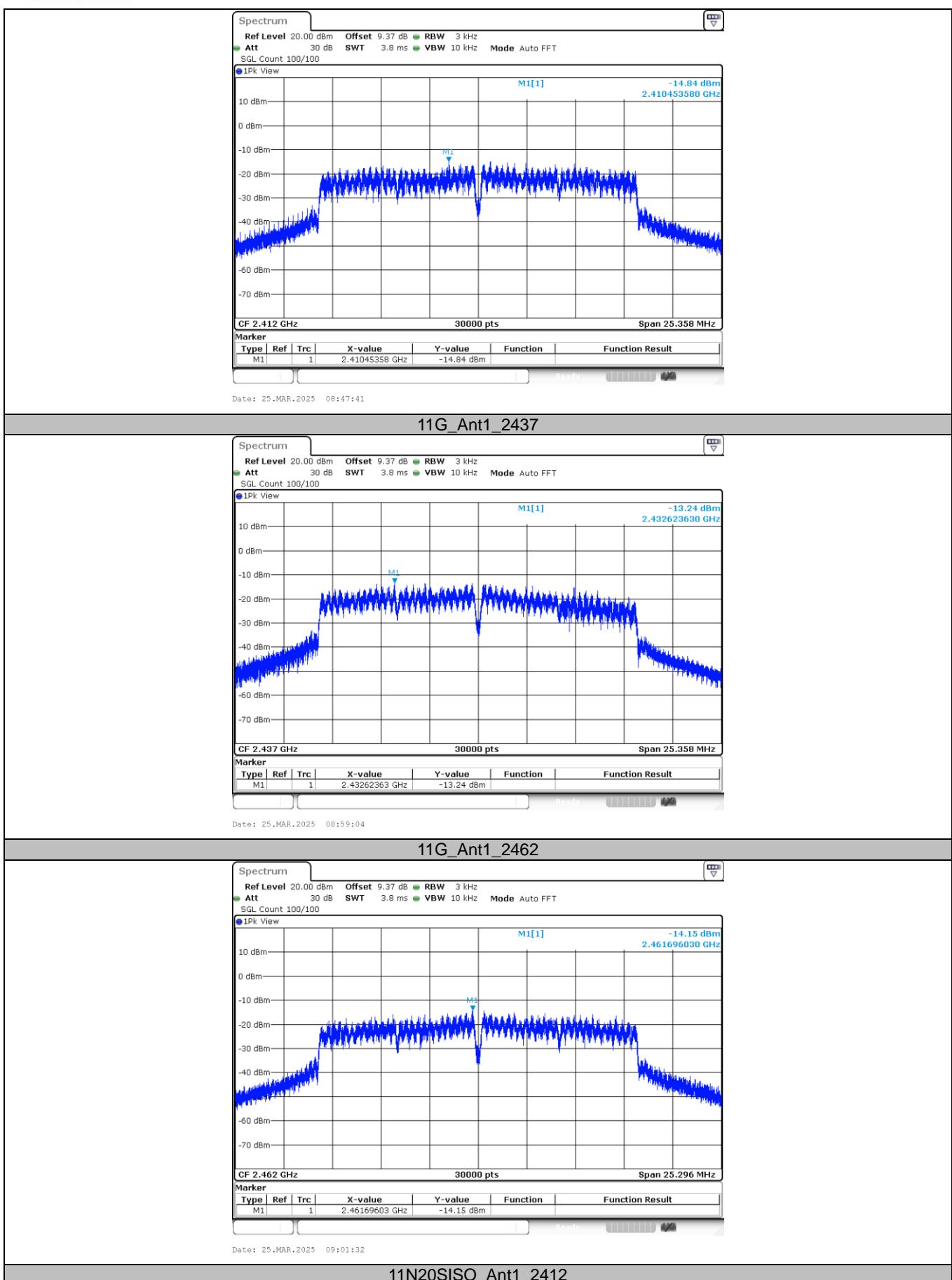


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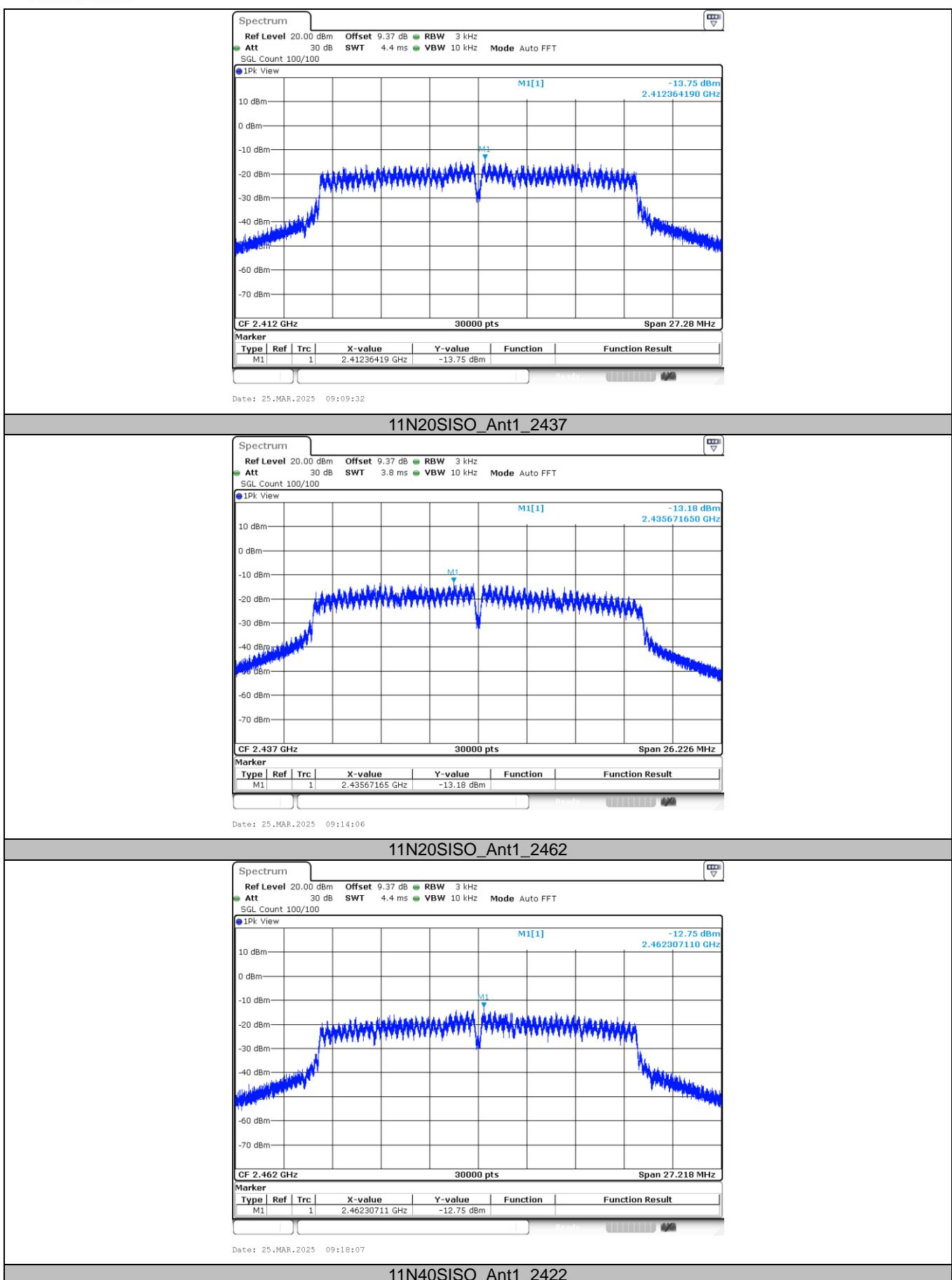


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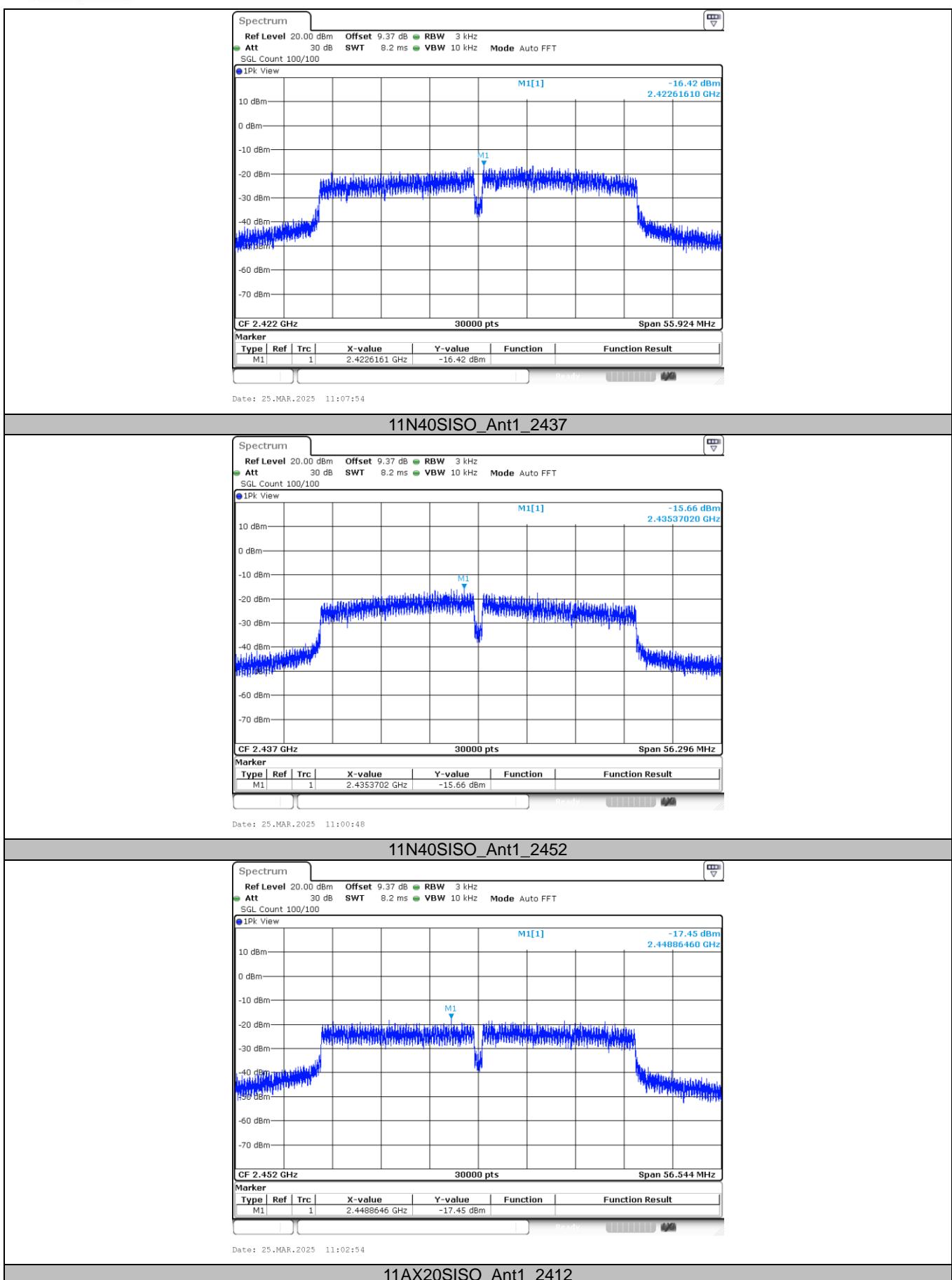


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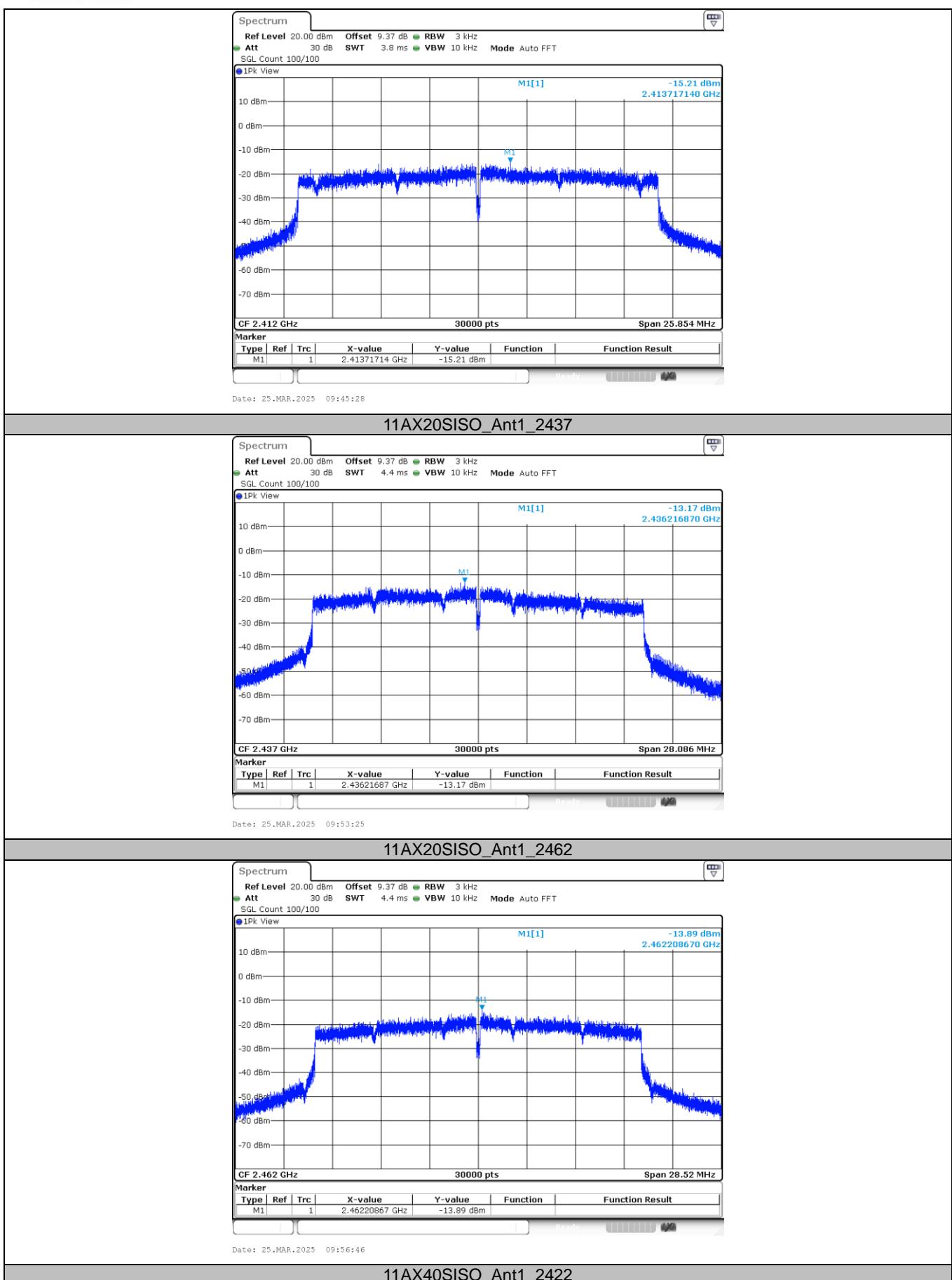


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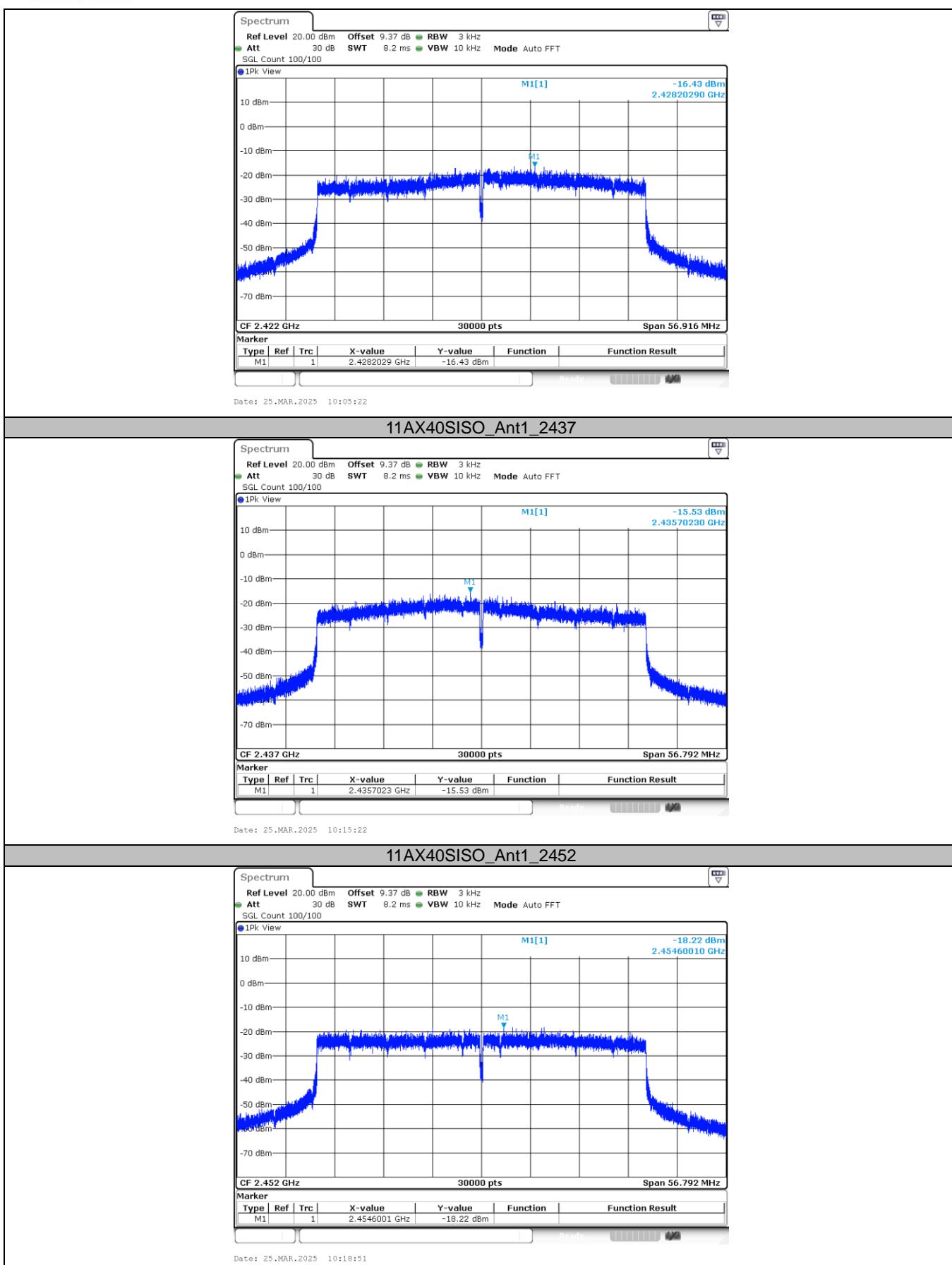


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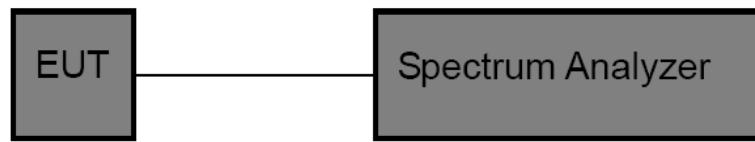


3.8. Duty Cycle

Limit

None, for report purposes only.

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.
3. Spectrum Setting:
Set analyzer center frequency to test channel center frequency.
Set the span to 0Hz.
Set the RBW to 10MHz.
Set the VBW to 10MHz.
Detector: Peak.
Sweep time: Auto.

Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

Test Mode

Please refer to the clause 2.4.

**Test Result**

Test Mode	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	DC [%]	1/T Minimum VBW (kHz)	Final Setting for VBW (kHz)
11B	2412	8.40	19.84	42.34	0.12	1
	2437	8.40	18.48	45.45	0.12	1
	2462	8.40	18.56	45.26	0.12	1
11G	2412	1.38	11.52	11.98	0.72	1
	2437	1.38	11.52	11.98	0.72	1
	2462	1.38	11.52	11.98	0.72	1
11N20SISO	2412	5.10	15.36	33.20	0.20	1
	2437	5.10	15.36	33.20	0.20	1
	2462	5.10	15.36	33.20	0.20	1
11N40SISO	2422	4.92	15.18	32.41	0.20	1
	2437	4.92	15.18	32.41	0.20	1
	2452	4.86	15.12	32.14	0.21	1
11AX20SISO	2412	3.90	14.70	26.53	0.26	1
	2437	3.84	14.16	27.12	0.26	1
	2462	3.84	14.16	27.12	0.26	1
11AX40SISO	2422	3.84	14.10	27.23	0.26	1
	2437	3.90	14.16	27.54	0.26	1
	2452	3.84	14.16	27.12	0.26	1

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Test Graphs



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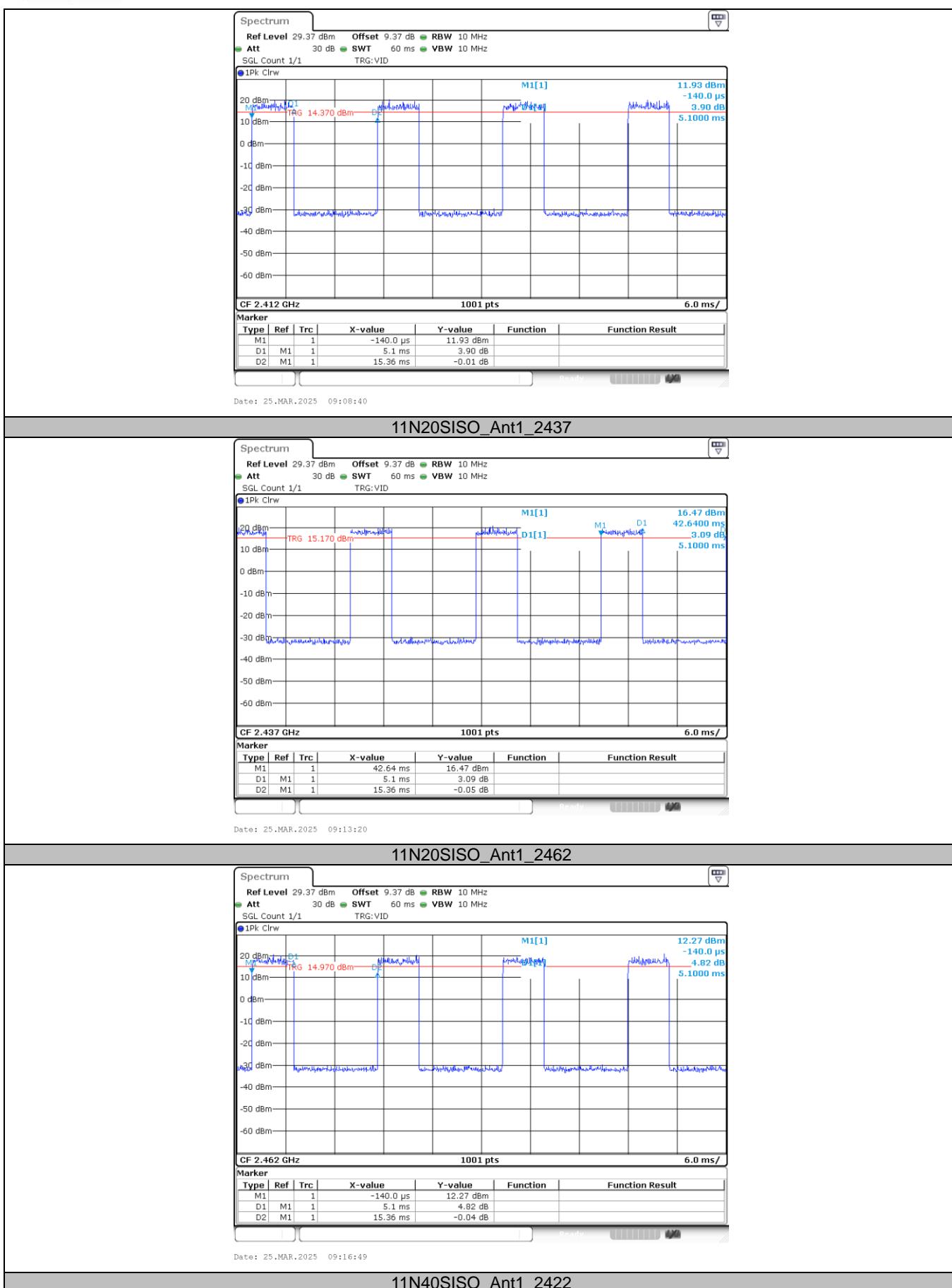


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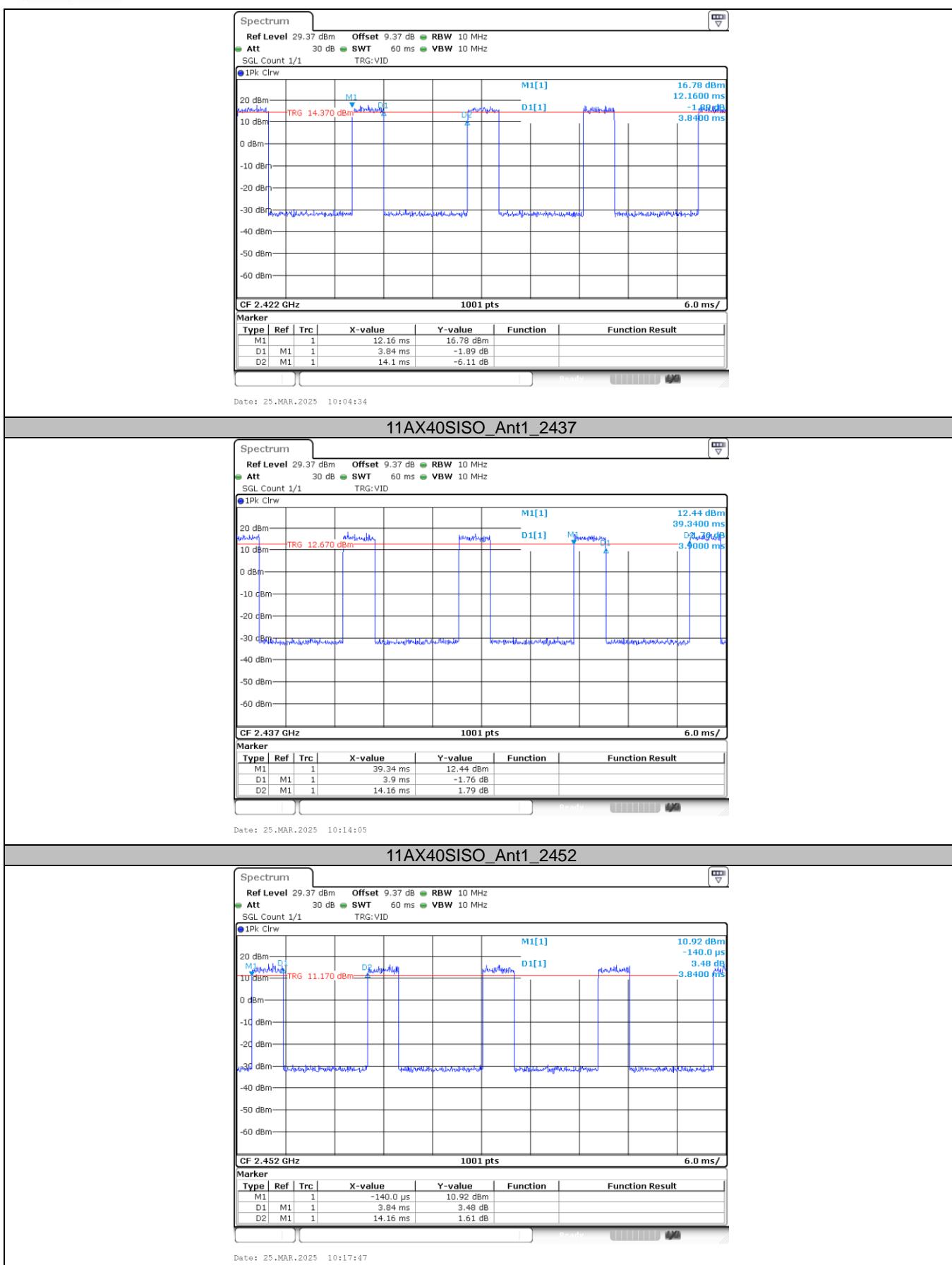


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3.9. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i)

(i) Systems operating in the 2400~2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

Test Result

The directional gain of the antenna is less than 6dBi, please refer to the EUT internal photographs antenna photo.

*****THE END OF REPORT*****